CESPK-ED-E (SFO) 1 August 1998
FACT SHEET
SUPPORT FOR OTHERS
EPA REGION VIII

1. PROJECT IDENTIFICATION:

Name: Naples Truck Stop

Location: Vernal, Utah

Task: Install free product recovery and groundwater treatment system at the Naples Truck Stop in Vernal, Utah. Perform short and long term Operation and Maintenance (O & M) of the selected system until soil and groundwater testing indicate that water quality is within EPA and State of Utah standards.

2. POINTS OF CONTACT:

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3. BACKGROUND:

A below ground storage tank pipeline release was noted on 1 November 1993 by Questar Pipeline Company in one of their existing monitoring wells. The source of the release was an underground pipeline on the adjacent Naples Truck Stop property. Estimated quantity of spill is 7,000 - 10,000

gallons of unleaded gasoline. Questar attempted to stop the contaminated plume from migrating towards a domestic water supply, but was unsuccessful. EPA Region VIII was notified, and they engaged the services of the Corps of Engineers, Omaha District (CEMRO) to execute an Immediate Response removal action to stabilize the situation and begin extraction and treatment of the affected groundwater.

CEMRO contracted with IT Corporation for the removal and treatment process. IT drilled several extraction and monitoring wells to determine what type of treatment method would work best for this situation.

IT Corporation is using a technique called vacuum enhanced pumping (VEP) because of its proven ability to recover products of this type in similar geologic formations. VEP is effective because it a) recovers residual volatile organic compounds (VOC) below the static water table, b) recovers VOC's from within the cone of depression created by pumping of the aquifer, and c) effectively remediates the "smear" zone by the combined use of vapor and water extraction.

4. SCOPE OF SERVICES:

Jacobs Engineering will perform the long term Operation and Maintenance (O&M) of the system left in place by IT Corporation. Work will include well monitoring and sampling on a scheduled periodic basis. Water samples will be sent to a certified lab for analysis of total petroleum hydrocarbons (TPH) and benzene, toluene, ethyl benzene, and xylene (BTEX). The enhanced soil vapor extraction system (ESVES) process and aerobic bioremediation will continue until samples indicate that the treated water can be discharged to the local publicly owned treatment works (POTW) or processed through the air stripper.

5. CURRENT STATUS:

IT Corporation expected to have their entire system operational by the first week of November 1994. They ran tests to balance the system and prepare O&M manuals. A series of system malfunctions have occurred during the November 94-January 95 time frame. Jacobs Engineering, through CESPK, will have a contract in place so their people can travel to the site and observe the system, and learn how to operate it. IT Corporation now expects to leave the site in February 1995. Jacobs will then perform long term O&M until test results indicate clean ground water. The precise scope of Jacobs' efforts will not be definitized until the March-April 95 time frame.

The SPK Technical Manager and members of Jacobs Engineering Group traveled to the site on 15-17 February 1995 to take over the project management from Omaha District and IT Corporation. The actual "take over" date was on 1 March 1995.

Funding of $300K has been received from EPA Region VIII to

award an Unpriced Change Order to Jacobs Engineering. Award of the UPCO (for $200K) occurred on 2 March 1995. In early May, the A-E was authorized to spend up to 75% of the UPCO amount prior to negotiation.

The first few rounds of air and water sampling indicate very low levels of TPH for the influent and effluent groundwater, but extremely high levels of VOC in the air samples. Omaha District COE was informed of this, and the suitability of the selected treatment method will be analyzed.

Omaha District took airstream samples on 27 April 1995. Omaha District and IT Corporation evaluated the results and implemented a change to the system. During the week of 22-26 May, IT Corporation installed a thermal oxidizer unit. Jacobs engineering personnel were partially trained on maintenance of the thermal oxidizer unit. Additional training will be required, as well as more frequent sampling of the airstream than originally specified in the Scope of Work.

After installation of the thermal oxidizer unit, numerous system shut-downs were occurring, usually daily. Condensation is the problem. Jacobs Engineering has installed at "know-out" unit which hopefully will cure the condensation problem.

Jacobs Engineering submitted a revised fee proposal on 25 May 95. Due to problems with system shut down and installation of the thermal oxidizer unit (and the "knock-out" unit), he SSOW will be revised and re-issued as an amendment to the UPCO. Negotiations will be scheduled for late July or early August 1995.

After consultation with CESPK Contracting Division, it was decided that all work related to the 31 January 95 SOW will be definitized and negotiated. A separate Delivery Order (and Scope of Work) will be issued for all work relating to the thermal oxidizer unit. This will be a firm fixed price contract, <u>not</u> an Unpriced Change Order.

Negotiations were held with Jacobs Engineering on 22 August 1995. The Unpriced Change Order (SOW dated 31 January 1995) was negotiated for a total fee of $398,214. A separate Supplemental Scope of Work (dated 1 August 1995) was issued to the A-E for thermal oxidation unit-related work and associated emergency responses for system shutdowns. A fee of $100,649 was negotiated for this effort. The Delivery Order in the amount of $398,214 is being processed for award.

EPA Region 8 was contacted on 23 August 1995 and informed of the negotiated amounts. An additional $120,000 was requested for award of the thermal oxidation mod ($100,649) and to cover Sacramento District COE In-House expenses. EPA agreed to the request, and sent an additional $120,000 on 30 Aug 95.

1 Oct 95 -- Both change orders (398,214 and $100,649) were awarded 22 Sep 95.

1 Nov 95 -- Preliminary Lab results from the October sampling are due 6 Nov 95. Based on these lab results, a determination will be made on whether to lease the thermal oxidation unit for an additional three month period beyond 30 Nov 95.

1 Dec 95 -- The A-E proposed, and EPA Region VIII agreed, that the bio-treatment system can be disconnected, and only the thermal oxidation unit will be kept in operation. A SSOW was issued to the A-E on 21 Nov 95; negotiations were held on 28 Nov 95; a modification for $24.7K will be issued to eh A-E in early December 95.

A meeting is tentatively scheduled for the week of 22 Jan 96 at the site to discuss status of the project.

1 Jan 96 -- Only the thermal oxidation unit is presently in operation. A meeting will be held at the Questar Pipeline Conference Room in Vernal, Utah, on 23 Jan 96 to discuss status of the project. Representatives from the A-E (Jacobs Engr. Group), Corps of Engineers (Sacramento District), EPA Region 8, Coast Guard (Oil Spill Liability Trust Fund), and State of Utah DEQ will be present.

1 Feb 96 -- A meeting was held on 23 January 1996, at the Questar Pipeline Conference Room. The A-E presented an overview of the project, and showed how the TPH and BTEX levels have declined over time. It was agreed hat the A-E's contract would be modified to cover an additional four months, i.e., March-June 1996. A meeting will be scheduled for June 1996 to discuss project status and close-out.

1 Mar 96 -- A mod to the A-E's contract for the March-June 1996 time was awarded 2/28/96. The A-E is exploring the option of using other thermal-ox vendors, or switching to a GAC system only.

1 Apr 96 -- Received approval from EPA to switch to a GAC system only (disconnect thermal-ox unit and return to the vendor by 29 March 1996).

1 May 96 -- Thermal-ox unit was returned to the vendor by 31 March 96. Granular Activated Carbon (GAC) unit was installed and became operational the first week of April.

A meeting will be scheduled at the site for early-mid June 96 to discuss project status and possible close-out.

1 Jun 96 -- A meeting is scheduled for 18 June 96 at the Questar Pipeline conference room in Vernal, Utah, to discuss project status and close-out.

1 Jul 96 -- On 18 June 96, a meeting was held at the site to discuss project status. it was agreed that the treatment of groundwater and soil vapor would continue for an additional year (through June 1997). The A-E's contract will be modified for an additional year of O&M services.

1 Aug 96 -- Jacobs' contract was modified for a one year extension to cover O&M of the treatment system through June 1997.

There will be a 3-month shutdown of the system (approximately mid-December 96 thru mid-March 97) during the winter; groundwater samples will still be taken and analyzed during this period.

1 Sep 96 -- Monthly sampling and O&M activities are continuing as scheduled.

1 Oct 96 -- Quarterly report was prepared and distributed. Routine monthly activities continue.

1 Nov 96 -- Routine monthly sampling and O&M activities continue. A project status meeting is tentatively scheduled for 10 December 96 at the site in Naples, Utah.

1 Dec 96 -- A project status meeting is scheduled for 10 December 96 at the Questar Pipeline Conference Room in Naples, Utah.

1 Jan 97 -- Project status meeting was held at Questar Pipeline Conference Room on 10 Dec 96. It was agreed that the A-E's contract would be modified to include two additional recovery wells near MW-10. A fee of $18,166 for the two additional recovery wells was negotiated on 30 Dec 96. Mod to contract will be awarded in early Jan 97.

EPA Region 8 (Hays Griswold) agreed to check on the feasibility of using EPS's "START" contract for installing geoprobes/hydropunching near the six ASTs located along Naples Truck Stop's north boundary. This is an attempt to determine if a new or continuous source of fresh product is entering the plume.

State of Utah DEQ (Ted Allen) will check with Mr. Croft (Truck Stop Owner) on status of leak tests.

1 Feb 97 -- Leak tests were performed on several ASTs on the adjacent Texaco Truck Stop property. All tests show the lines were tight. EPA will have its "START" contractor perform some geoprobe work near the ASTs during the week of 17 Feb 97.

1 Mar 97 -- Meeting is scheduled for 18 March 97 at the project site (Questar Conference Room) to discuss project issues and status.

1 Apr 97 -- Meeting of 18 March 97 was rescheduled for some time in early to mid-May 97, possibly 13 May 97.

1 May 97 -- Meeting is scheduled for 20 May 97 at Questar Pipelines Conference Room to discuss project status.

1 Jul 97 -- A meeting was held at the Questar Pipelines Conference Room in Vernal, Utah, on 20 May 1997. It was decided that the treatment system needs to be operated for another year. A mod to Jacobs Engineering's contract was negotiated on 17 June 97. Contract award is anticipated 1 or 2 July 1997.

1 Aug 97 -- Contract was awarded on 3 July 97 for Jacobs Engineering to perform one additional year of operation and maintenance of the system.

1 Oct 97 -- Jacobs will be on site during the week of 6-10 October to make modifications to the system and to remove the bio-treat tanks from the CME building. The work will make the system perform more efficiently, and will prepare it for the upcoming 3-month winter shutdown. BTEX and VOC's continue to be recovered near well MW-10.

1 Nov 97 -- On-site work performed 6-10 October 1997.

1 Apr 98 -- System was re-started on 1 March 98 after a 3-month winter shutdown. Review meeting will be scheduled for late April or early May at project site.

1 Aug 98 - A meeting was held at the site on 30 June 98 to discuss phyto-remediation (planting of trees for removal of remaining VOC's); approximately 250 trees will be planted at the site. A meeting is scheduled for 11 August 98 to further discuss phyto-remediation requirements and implementation. An EPA Phyto-Remediation expert from ERT in New Jersey will attend.